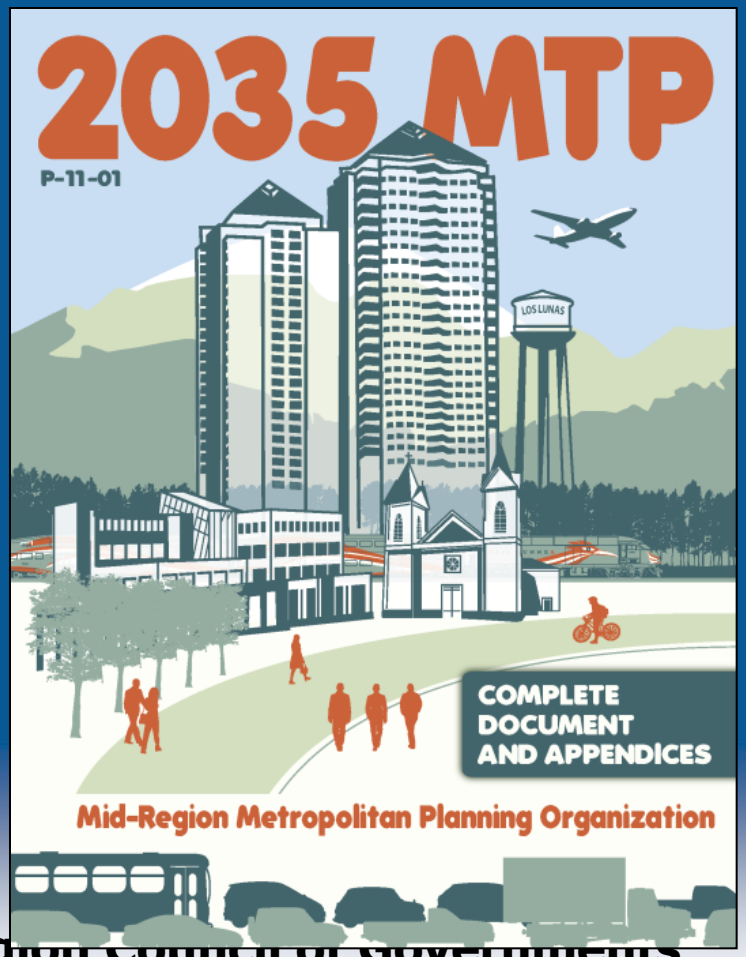
2040 MTP and Climate Change Scenario Planning Project Workshop Summary

July 10, 2014

Mid-Region Council of Governments

Metropolitan Transportation Plan

- Long-range (20+ years) multi-modal transportation plan for the Albuquerque metro area
- Updated every 4 years (current update → April 2015)
- Projections of growth/development
- List of all anticipated transportation projects in the region



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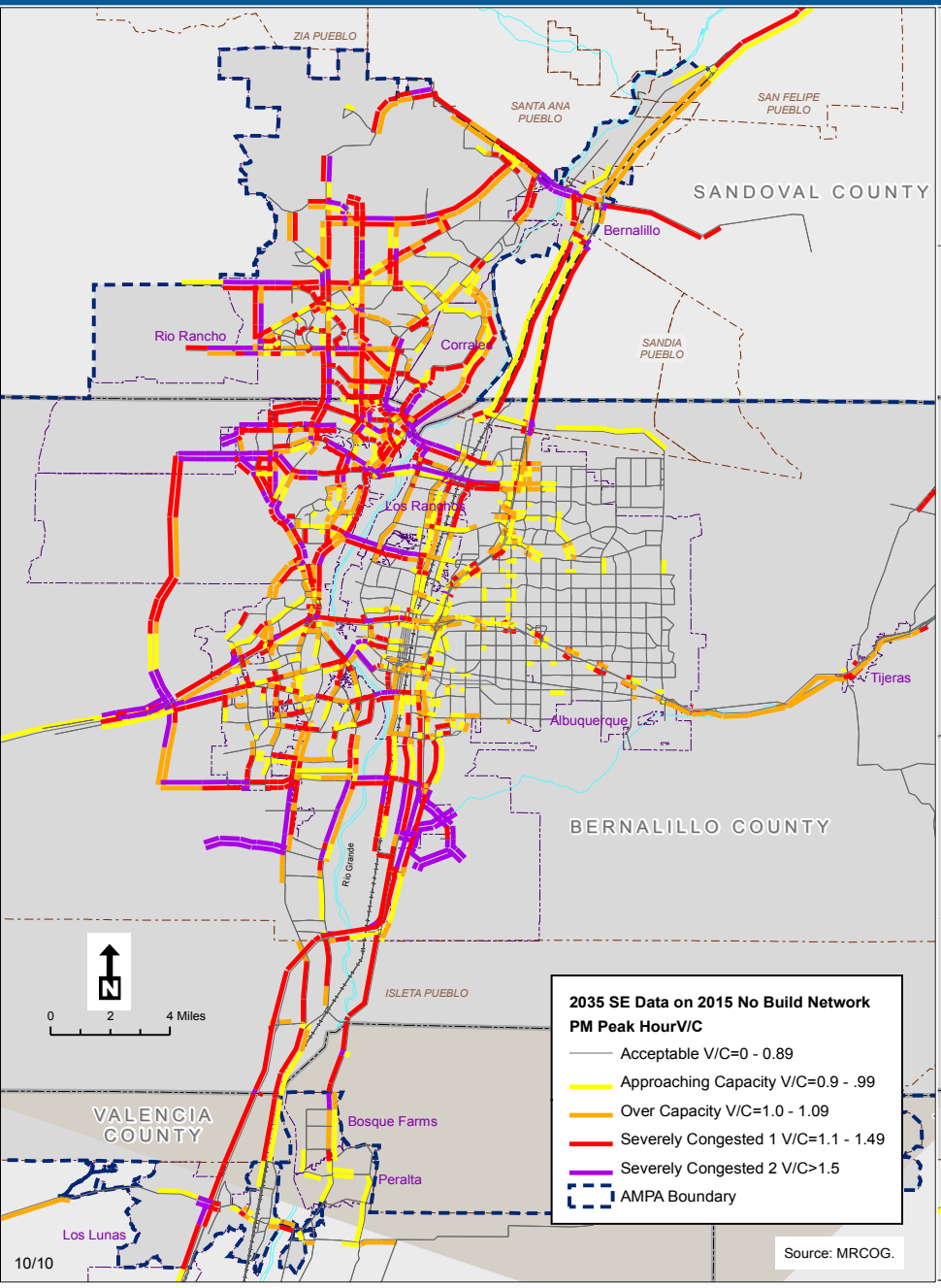
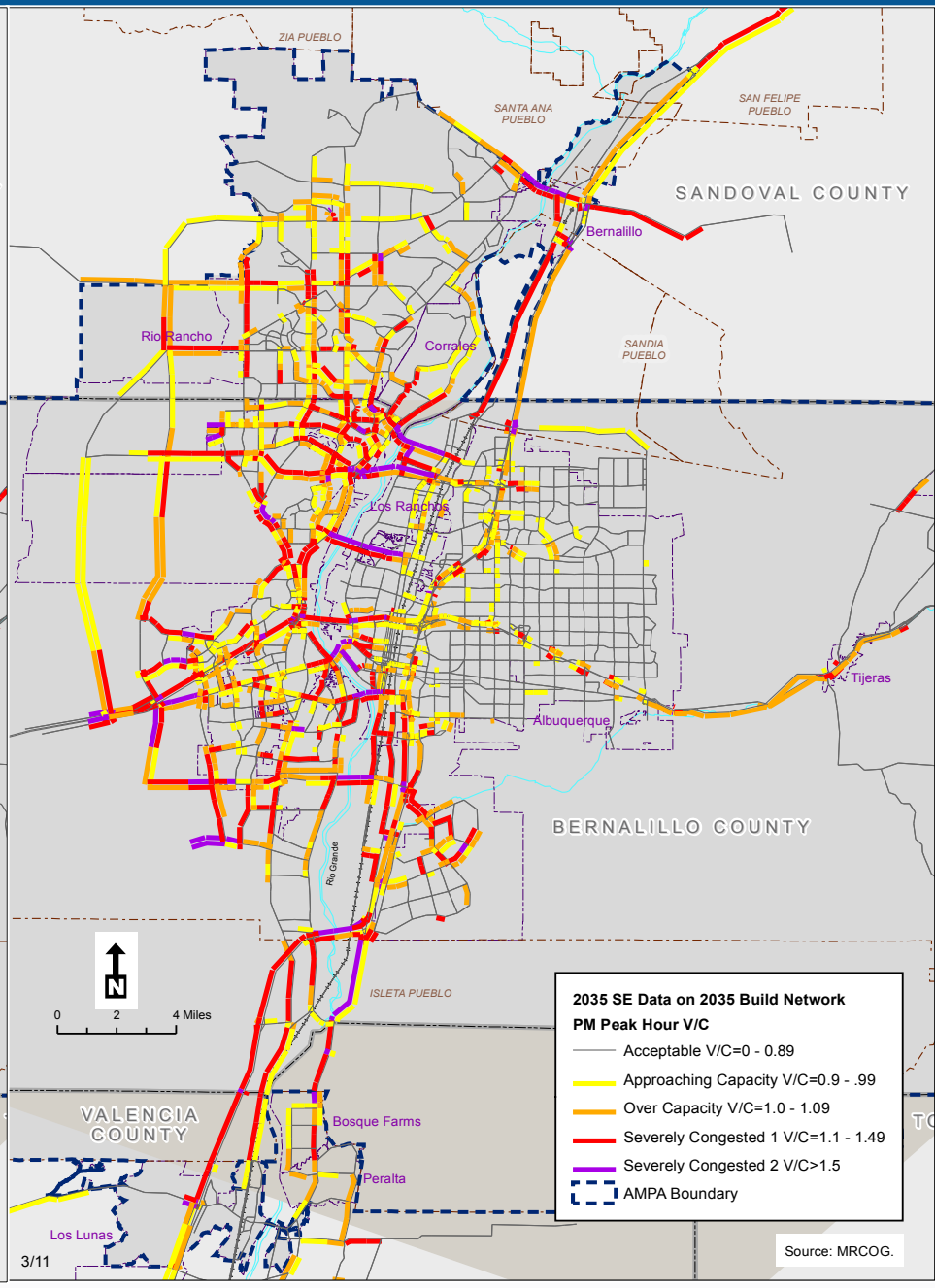
MTP Questions

- Can our transportation infrastructure handle the projected growth?
- What roles should different modes play?
- What types of strategies and investments should we pursue?
- How much money is available?
- What are the impacts on air quality and other basic environmental factors?

2035 No-Build



2035 Build

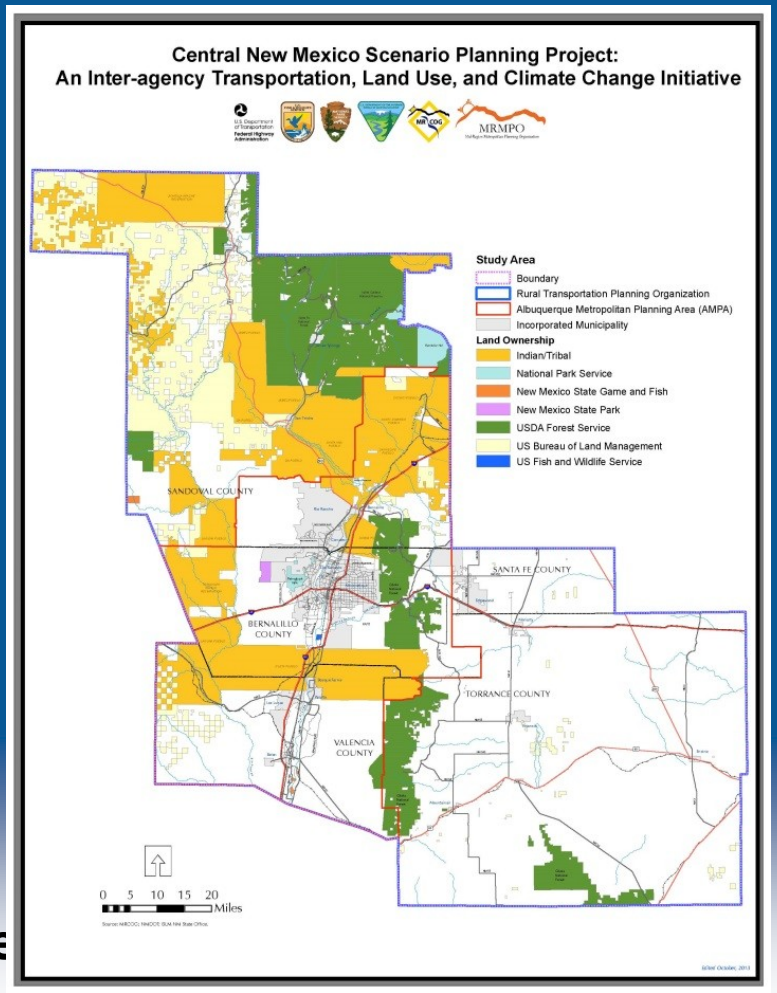


Key Findings from 2035 MTP

- River crossing congestion is a critical issue, and no new bridges have been proposed
- Building our way out of congestion is not realistic
- There is no silver bullet. A variety of strategies will be necessary to tackle congestion.
- There is a critical link between land use patterns and transportation conditions

Central New Mexico Climate Change Scenario Planning Project

- Funded by FHWA and other federal partners
- Participation of US DOT Volpe Center
- Partnership with federal land management agencies
- Introduce climate change analysis into long-range planning process



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Central New Mexico Climate Change Scenario Planning Project

- **Climate futures**
  - Temperature
  - Precipitation levels
- **Climate change impacts on central New Mexico**
  - Will we get hotter and drier?
  - What happens to our water supply?
  - Droughts? Wildfires? Flooding?
- **Consider whether development patterns make us more or less resilient to climate impacts**

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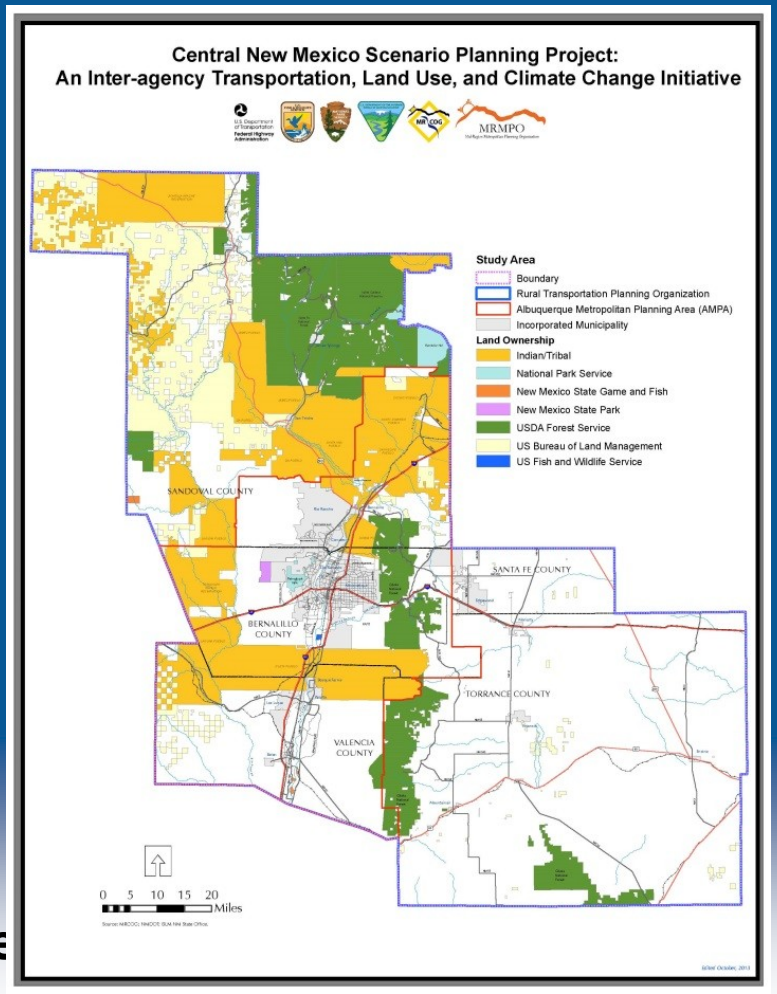
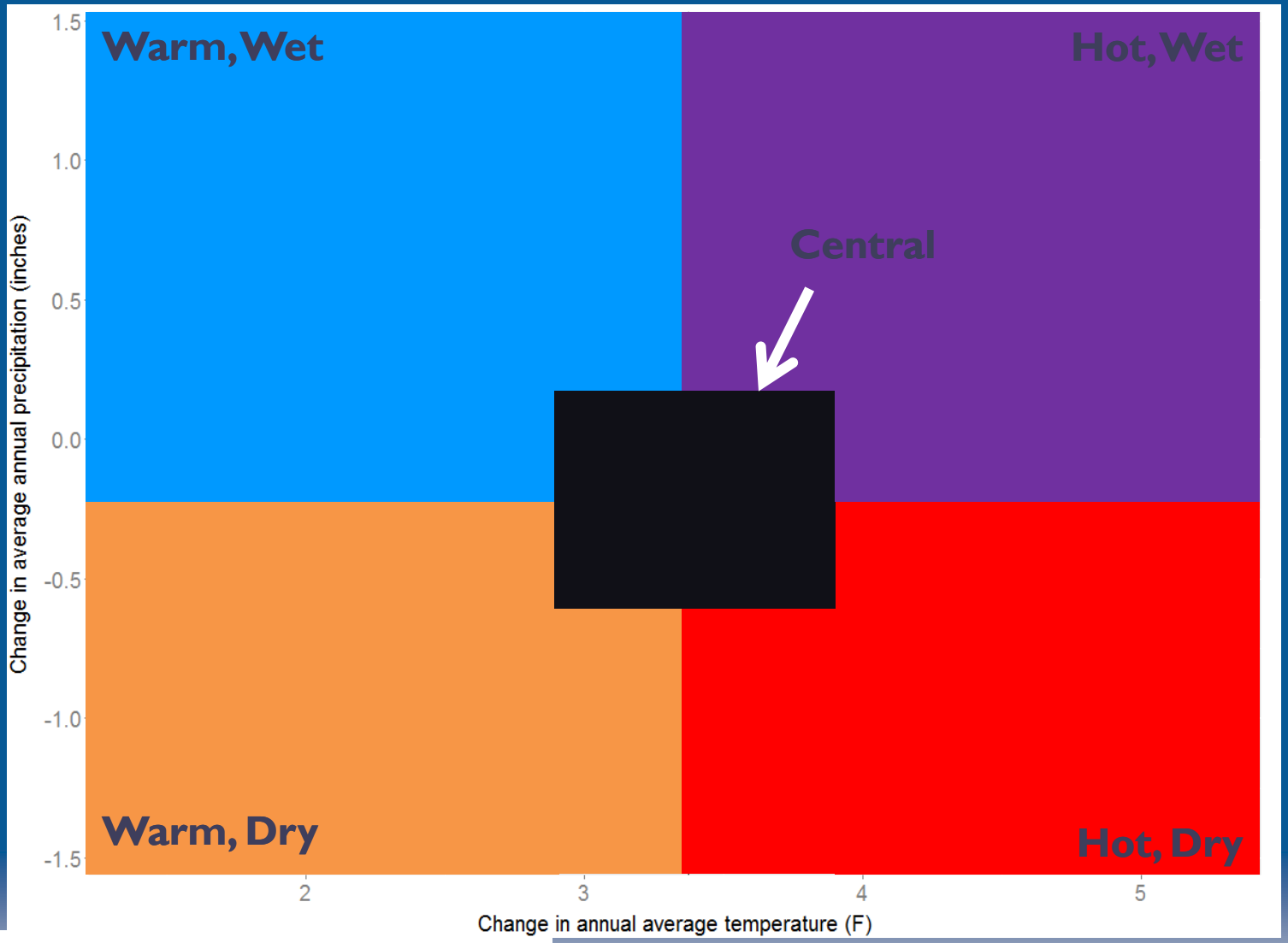


Projected Changes in Climate Means - 2040



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Big Picture Climate Implications

- Greater changes in temperature than in precipitation
- Projected **2.4 °F to 4.3 °F increase in annual temperature**
- Projected **-13% decrease to +10% increase in annual precipitation** (Bureau of Reclamation)
- More pronounced temperature increases in the summer
- More drought regardless of precipitation due to the increased evaporation from higher temperature
- More, longer heat waves
- More extreme, variable precipitation events

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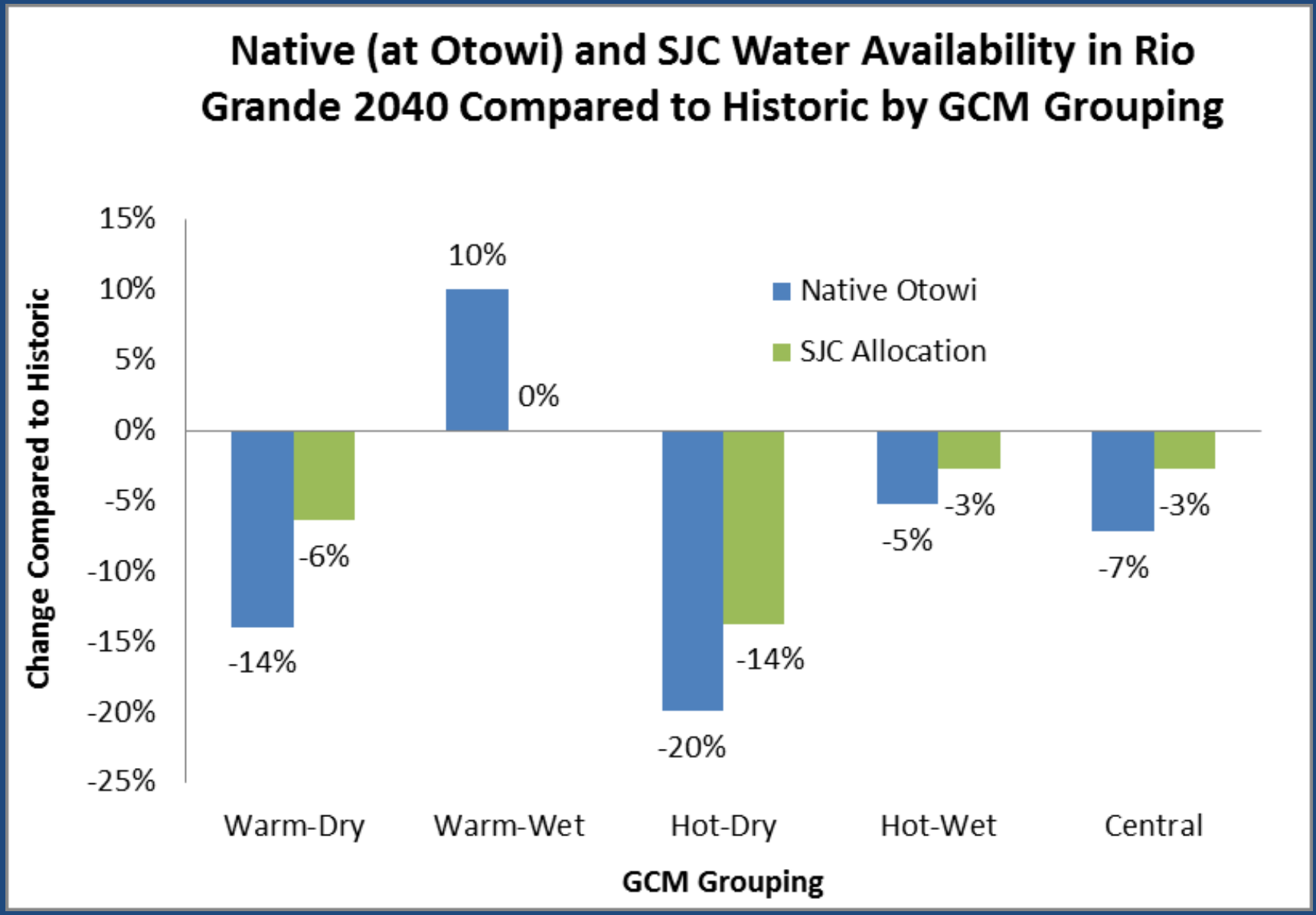
Implications for the Region

- Transportation-related
  - Higher maintenance costs (e.g., faster pavement deterioration)
  - Construction and operations implications (e.g., shorter construction season)
  - More damage from extreme events (e.g., flash floods, wildfires, and landslides)
- Land Use/Regional Planning
  - More frequent water shortages
  - Greater power demand
  - Higher vulnerability for development near riparian areas/on the urban-wildland interface

Water Availability in ABQ Area: 2040



Water Availability in 2100

According to the Upper Rio Grande Impact Assessment:

- Rio Grande flows decrease by 1/3
- San Juan-Chama flows decrease by 1/4

Futures 2040 MTP

- December 2014 – Draft MTP for public comment
- January 2015 – Public meetings
- January/February 2015 – Identify projects to receive federal funding
- March 2015 – Final draft for public review
- April 2015 – Plan approval by Metropolitan Transportation Board